

What is claimed is:

1. A method for assigning PN offsets of a synchronized timing system to sectors of communication cells in a communications network comprising the steps of:

determining a minimum delay offset between PN offsets that will avoid signal collision when the PN offsets are assigned to adjacent sectors of the same cell ;

applying delay offsets of no less than the minimum delay offset between PN offsets assigned to adjacent sectors of the same cell; and

applying varied delay offsets between PN offsets assigned to sectors of different cells.

2. The method of claim 1 and further comprising the steps of:

determining that the minimum delay offset is two (2); and

applying a delay offset of two (2) between PN offsets assigned to sectors of the same cell.

3. The method of claim 1 and further comprising the steps of:

determining that the minimum delay offset is two (2); and

applying a delay offset of at least three (3) between PN offsets assigned to adjacent sectors of the same cell.

4. The method of claim 1 and further comprising the steps of:

applying delay offsets of more than the minimum delay offset between the PN offsets assigned to sectors of the same cell.

5. The method of claim 4 and further comprising the steps of:

determining that the minimum delay offset is two (2); and

applying a delay offset of at least three (3) between PN offsets assigned to sectors of the same cell.

6. The method of claim 1 and further comprising the step of:

applying a varied delay offset of more than the minimum delay offset between PN offsets assigned to sectors of different cells when the different cells are within five cells of each other.

7. The method of claim 6 and further comprising the step of:

applying a varied delay offset of at least 10 between PN offsets assigned to sectors of different cells when the different cells are within five cells of each other.

8. The method of claim 6 and further comprising the steps of:

determining that the minimum delay offset is two (2); and

applying a delay offset of two (2) between PN offsets assigned to adjacent sectors of the same cell.

9. The method of claim 6 and further comprising the steps of:

determining that the minimum delay offset is two (2); and

applying a delay offset of three (3) between PN offsets assigned to adjacent sectors of the same cell.

10. The method of claim 6 and further comprising the steps of:

applying a delay offset of more than the minimum delay offset between the PN offsets assigned to adjacent sectors of the same cell.

11. The method of claim 6 and further comprising the steps of:

determining that the minimum delay offset is two (2); and

applying a delay offset of three (3) between PN offsets assigned to adjacent sectors of the same cell.

12. The method of claim 1, and further comprising the step of:

assigning the PN offsets to the sectors in a 25 spatial reuse pattern.

13. A network of communication cells having sectors assigned with PN offsets of a synchronized timing system, comprising:

the PN offsets that are assigned to adjacent sectors of the same cell having no less a minimum delay offset therebetween to avoid signal collision; and

the PN offsets that are assigned to sectors of different cells having varied delay offsets therebetween.

14. The network of claim 13 and further comprising:

the PN offsets that are assigned to adjacent sectors of the same cell being applied with the minimum delay offsets therebetween.

15. The network of claim 14 and further comprising:

the minimum delay offset is two.

16. The network of claim 13 and further comprising:

the PN offsets that are assigned to adjacent sectors of the same cell being applied with delay offsets therebetween of more than the minimum delay offset.

17. The network of claim 16 and further comprising:

the minimum delay offset is two (2); and

the PN offsets that are assigned to adjacent sectors of the same cell being applied with delay offsets therebetween of (3).

18. The network of claim 16 and further comprising:

the PN offsets assigned to sectors of different cells being applied with varied delay offsets that are more than the minimum delay offset when the different cells are within five cells of each other.

19. The network of claim 18 wherein;

each of the varied delay offsets is ten (10).

20. The network of claim 16 and further comprising:

the PN offsets are assigned to sectors in a 25 spatial reuse pattern.